

July 2, 2003

APPLICATION FOR
UNITED STATES UTILITY PATENT
SPECIFICATION

TO ALL WHOM IT MAY CONCERN:

Be it known that I, Paul B. McKee, a citizen of the United States of America, and resident of the State of Florida, having a postal address of 26 Dogwood Circle, Boynton Beach, Florida 33436-9145, have invented a new and useful "**DUAL FLUSH TOILET VALVE**", of which the following forms the specification.

The U.S. Patent Department issued a disclosure document
#531629 on 05-19-03

"DUAL FLUSH TOILET VALVE"

CROSS REFERENCE TO RELATED APPLICATIONS

Not applicable.

STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT

Not applicable.

REFERENCE TO MICROFICHE APPENDIX

Not applicable.

BACKGROUND OF THE INVENTION

Field of the Invention

The present invention relates to the field of toilet devices, and more particularly to a dual flush toilet that conserves water.

Description of Related Art

As can be seen by reference to the following patent Nos. 5,067, 180; 5,111, 537; 5,887, 292 and 6,173, 456. The prior art is replete with myriad and diverse bathroom fixtures designed to conserve water.

DESCRIPTION OF RELATED ART CONTINUED

While all of the aforementioned prior art constructions are more than adequate for the basic purpose and function for which they have been specifically designed, they are uniformly deficient with respect to their failure to provide a simple, efficient and practical toilet that effectively conserves water. My valve design will correct all of these deficiencies. As a consequence of the foregoing situation, there has existed a longstanding need for a new and improved dual flush toilet valve and the provision of such a construction is a stated objective of the present invention.

BRIEF SUMMARY OF THE INVENTION

Briefly stated, the present invention provides a dual flush toilet valve within a flush tank. Each valve flap 4 works independently of the other with the discharge openings in communication with the flush tank outlet and the inlet opening of the toilet bowl.

Separate operator handles are provided for the separate flush valve flaps 4 so that the appropriate flush valve flap can be selectively opened to dispose of waste material.

BRIEF SUMMARY OF THE SEVERAL VIEWS OF THE DRAWINGS

These and other attributes of the invention will become more clear upon a thorough study of the following description of the best mode for carrying out the invention, particularly when reviewed in conjunction with the drawings, wherein:

FIG. 1 is a top plan view of the dual flush valve.

FIG. 2 is a front elevation sectional view of the dual flush valve when it is used to replace the existing flush valve or built into a new flush tank.

FIG 3 is a view showing the dual flush valve when it is used in conjunction with the existing flush valve.

FIG. 4 shows how this valve can be anchored to the existing flush valve.

FIG. 5 shows 2X size view of flush handles on the exterior of the existing tank.

FIG. 6 shows full scale view of flush handle levers on interior of existing tank.

NOTE FOR FIGURE 5 AND 6:

If new tank construction and a second handle hole is opened in the wall of the tank, then standard commercial flush handles and levers can be used.

As can be seen by reference to the drawings and in particular to FIG. 1 and FIG. 2, the dual flush valve that forms the basis of the present invention is designated generally by the reference FIG. 1 and FIG. 2. The valve 1 includes two flaps 4 and 2 which slides up and down in 1 and is sealed by an "O" ring 15 and locked in place at desired height by a set screw 8. Lock ring 3 holds one flap 4 and is clamped in place by 6. 3 can be rotated 360°. Chain 5 attaches to lever 26 and chain 7 attaches to lever 27. The flush tank 14 has an outlet opening for 1 that communicates with the inlet bowl opening of the toilet.

The flush tank 14 has a water supply inlet that accommodates a water supply that provides water to the existing toilet tank and float shut-off valve.

As best shown in FIG. 3, the flush valve assembly 9 is slid into the flush tank outlet through the existing valve 13 and is sealed with an "O" ring 10. Except for threaded area of 1, the design is identical to 9.

As shown in FIG. 4, the link 11 secures to overflow tube 13. The flush valve assembly 1 and 2 provides (2) separate adjustable levels for discharge with flaps 4 with chains 5 which attaches to lever 26 and chain 7 which attaches to lever 27.

As best show in FIG 5, this 2X size view shows how handles are installed on exterior of existing tank. See 17 through 23 in FIG. 5.

As best shown in FIG. 6, the handles and levers are installed through the existing square opening in the existing wall from the exterior to the interior of tank 14. See 24 through 29 in FIG. 6. See note for FIG. 5 and 6 on Page 3 and Page 4.

After installation, the user simply actuates the appropriate operator handle to properly dispose of the waste material. Using the water supply in the adjustable partial flush 2 side of the valve will conserve many gallons of water each day and result in

significant savings. The design may be adapted to existing bathroom fixtures or be provided as original equipment.

Although only an exemplary embodiment of the invention has been described in detail above, those skilled in the art will readily appreciate that many modifications are possible without materially departing from the novel teachings and advantages of this invention. Accordingly, all such modifications are intended to be included within the scope of this invention as defined in the following claims.